

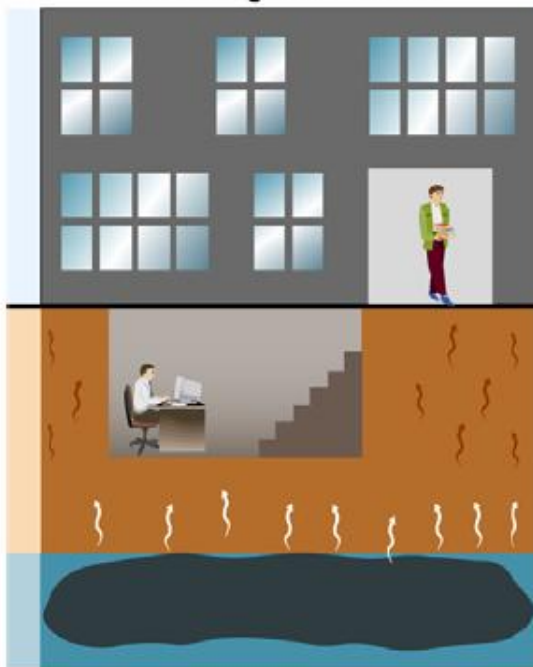
Vapor Intrusion Health Evaluation

HASLC
Neighborhood Meeting
August 9, 2012

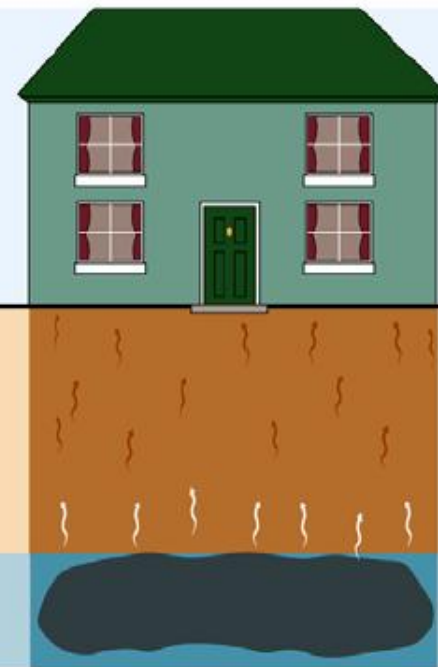
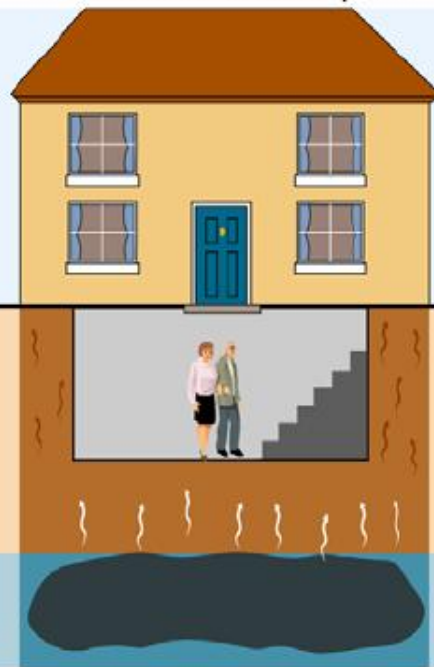
Presented by:
Missouri Department of Health & Senior Services
and the Agency for Toxic Substances & Disease Registry

How can chemicals in groundwater enter a building?

Commercial/Industrial Worker
Working over Plume



Resident Living over Plume
Basement or Crawl Space Without Basement



Indoor Air

Vadose Zone
Soil Gas

Soil and
Groundwater
Contamination

Exposure

Potential Exposure from the Groundwater Contamination:

- Your tap water is not affected by this contamination and is safe for all household uses including drinking, washing, etc.
- The exposure of interest is inhalation of volatile chemicals (chemicals that readily evaporate into air) from the groundwater contamination.

Potential Health Effects from Chemical Exposure

In general, exposure to a chemical does not necessarily mean that health effects will occur. Whether or not a person experiences health effects depends on several factors including:

- the toxicity and concentration of the chemical,
- the length and amount of exposure (short-term or acute versus long-term or chronic), and
- the health and sensitivity of the individual.

Potential Health Effects from Chemical Exposure

- Vapor Intrusion — the primary concern is low-level exposures over many years that can increase a person's risk of developing cancer or chronic disease.
- Chemicals in Everyday Life — volatile chemicals are around us everyday in both indoor and outdoor air because of widespread use. These everyday exposures also contribute to potential health risks.

Vapor Intrusion Sampling Results

Recent results show some vapor intrusion is occurring.

- The results show there are homes impacted with levels that are a potential concern for long-term exposure.
- The results DO NOT indicate an immediate health risk.

Vapor Intrusion Sampling and Recommended Actions

- There were chemical detections in every home sampled – additional sampling is already scheduled.
- A few of the homes had higher levels – at this time, mitigation actions are only recommended for these few homes.
- Expanded sampling is recommended to include more homes.